



RR-0860

Third Year B. Sc. Examination
March / April – 2010
Medical Technology
(IDS - CAN Course)
(Instrumentation & Labo. Management)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
T. Y. B. Sc.

Name of the Subject :
Medical Technology (IDS-CAN Course)

Subject Code No. : 0 8 6 0 Section No. (1, 2,.....): Nil

Seat No. :
[] [] [] [] [] []

Student's Signature

(2) Figures to the **right** indicate full marks of questions.

(3) Draw labelled diagram wherever necessary.

1 Answer the following in brief :

14

- What are the applications of flurochromes?
- Define and explain : TEMED.
- Differentiate kinetic method and end point methods used in laboratory analysis.
- Give two limitations of haematology analyzer.
- What is meant by partition coefficient ?
- Which are the lense and illumination systems used in electrone microscopes.

2 Comment/Explain any **three** of the followings :

15

- Proteins are separated by SDS-PAGE technique.
- Colorimeter differs from spectrophotometer.
- Ion-exchangers are working on the ionic strength of functional groups.

- (d) Radioisotopes has varied applications in diagnostic laboratory.
- (e) Laboratory management requires systemized approach.

3 Write an essay on : **10**
"Applications of chromatographic techniques and the instruments used for the diagnosis."

OR

"Autoanalyzers used for hematological measurements in laboratory diagnosis and its operation.

4 Answer any **two** of the following : **16**

- (a) How will you organize a clinical laboratory? Which are the organizing principles used for it?
- (b) What are the job profile of laboratory technologist and technicians at district central laboratory?
- (c) Write down the principles, operation and functions of gamma counter along with its uses.

5 Write down short notes on any **three** of the following : **15**

- (a) Isoelectric focusing
- (b) Laboratory quality control measures
- (c) Applications of Dark field microscope and the operational technique
- (d) Organization and uses of laboratory instruments
- (e) pH meter.
